



Determination 2009/18

Dispute about the number of sanitary fixtures to be provided for a warehouse at 19 Gerald Connolly Place, Sockburn, Christchurch

1. The matter to be determined

- 1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004¹ (“the Act”) made under due authorisation by me, John Gardiner, Manager Determinations, Department of Building and Housing (“the Department”), for and on behalf of the Chief Executive of that Department. The applicant is the owner, Calder Steward Industries Ltd acting through an agent. The other party is the Christchurch City Council (“the authority”) carrying out its duties as a territorial authority or a building consent authority.
- 1.2 The dispute arises from the authority’s assessment of the number of sanitary fixtures to be installed in the warehouse building (“the warehouse”) in order to comply with the Building Code².
- 1.3 I take the view that the matter for determination, in terms of sections 177(a) and 188³, of the Act, is whether the number of sanitary fixtures originally proposed by the applicant complies with Clause G1 Personal Hygiene of the Building Code (Schedule 1, Building Regulations 1992).
- 1.4 In making my decision, I have considered the submissions of the parties, together with the other evidence in this matter. However, I have not considered any other aspects of the Act or the Building Code.

2. The building work

- 2.1 The building work is a proposed steel-framed warehouse on a concrete slab foundation. The warehouse itself is single open space measuring 59 x 61 metres in plan with a stud height of about 6 metres and an overall area of about 3,600 m².

¹ The Building Act 2004 is available from the Department’s website at www.dbh.govt.nz.

² The Building Code is available from the Department’s website at www.dbh.govt.nz.

³ In this determination unless otherwise stated, references to sections are to sections of the Act and references to clauses are to clauses of the Building Code.

Adjoining the warehouse entrance is a large canopy under which is a small structure containing three toilets.

- 2.2 The building is to be used for the storage of milk powder and will be populated by forklift operators. The building forms part of a larger complex owned by the same owner. The existing buildings include other warehouse-type buildings and a building containing a dispatch office, eating, and toilet facilities.

3. Background

- 3.1 The application for building consent was made to the authority on 18 July 2008.

- 3.2 In response to the application the authority wrote to the agent on 23 August 2008 raising 4 items to be clarified which included the following requirement:

Provide toilet facilities as per NZBC G1/AS1. These are required as the building is classified as "Commercial" under the Building Regulations. The number of toilets will need to be calculated in relation to the design occupancy load (36) from the fire report as the DBH has determined. (Therefore 3 toilets required and 1 is required to be accessible).

- 3.3 The agent responded saying that the warehouse would house a maximum of three people who would use existing facilities located in an adjacent building.

- 3.4 In a letter dated 16 September 2008 the authority responded restating the above but added:

Due to a recent DBH determination, toilet facilities must be calculated on the design occupancy (to cover the life of the building). Therefore the toilet facilities must be calculated with regards to the 36 person design occupancy or you may wish to calculate the design occupancy and toilet facilities across the entire site. (This will need to be designed / calculated according to G1/AS1)

- 3.5 In a letter to the authority dated 18 September 2008 the agent submitted a "Portacom" building containing one accessible toilet which the agent said met the requirements for sanitary facilities according to Table 1 of G1/AS1. The letter also referred to email correspondence the agent had had with the Department about the calculation of sanitary facilities and said 'the fire calculation occupancy load is not intended for designing the number of toilet facilities for the building'. However, I note that in some instances it would be appropriate to use the fire occupancy numbers.

- 3.6 In response in a letter dated 7 October 2008 the authority said:

Known occupancy is considered relevant when it exceeds the design occupancy, if the known occupancy is less than the design occupancy overrides.

Sustainable environmental design cannot override legislative requirements in this case The Building Act 2004.

[The Department's] opinion . . . is not consistent with the Council's interpretation of the Code requirements nor any of the Determinations that note the use of the design occupancy.

The C clauses (fire) and G1/AS1 use the same occupant load design ratio therefore using fire design occupancy loads is applicable.

[The] requirement for 3 toilets still stands and is required to be met under the NZ Building Code.

- 3.7 The applicant agreed to provide the additional sanitary facilities in another “Portacom” building, but later to amended the building itself to include three toilets including one accessible toilet.
- 3.8 The authority accepted this and issued the building consent (No. 10087595) on 18 November 2008.
- 3.9 The application for determination was received on 4 December 2008.

4. The legislation and the Compliance Documents

- 4.1 The relevant Clause from the Building Code Clause G1 Personal Hygiene says:

Clause G1.3.1 Sanitary fixtures shall be provided in sufficient number and be appropriate for the people who are intended to use them.

Clause G1.3.4 Personal hygiene facilities provided for people with disabilities shall be accessible

Limits on application: G1.3.4 shall not apply to Housing, Outbuildings, Ancillary buildings, and to Industrial buildings where no more than 10 people are employed

- 4.2 The relevant sections from the Acceptable Solution for Clause G1, G1/AS1, includes the following:

1.1.2 WC pans and basins are required in any building where people:

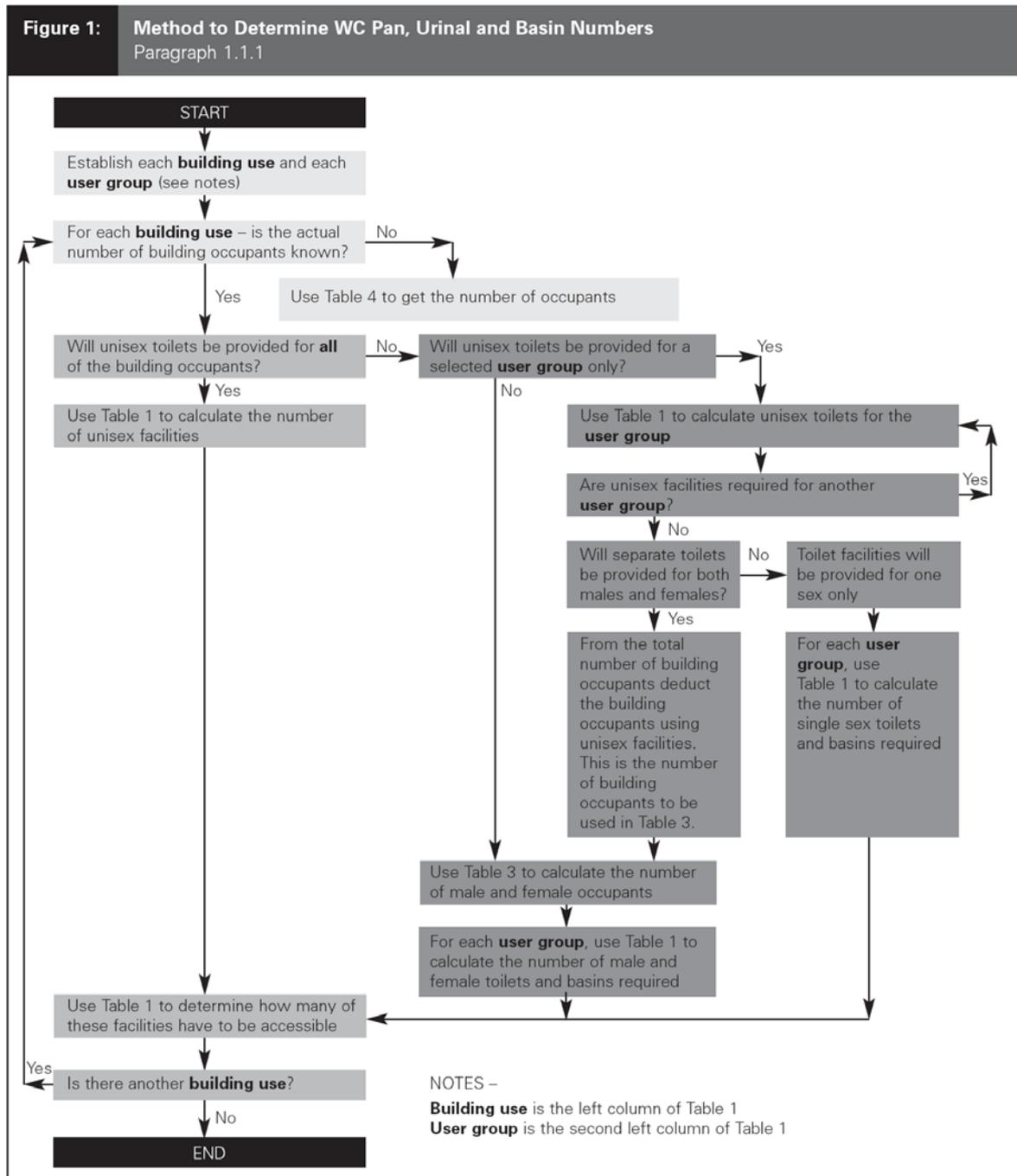
- a) live or are accommodated, or
- b) work
- c) . . .

1.1.5 The number of sanitary fixtures for the uses in [Paragraph 1.1.2] is calculated for:

- a) WC pans, urinals and basins – use Figure 1, Table 1, Table 3 and Table 4.

1.1.8 Where unisex facilities are provided, they shall:

- a) Be located in a self contained compartment offering full privacy by way of full height doors and walls,
- b) Contain a WC pan, basin, sanitary towel disposal equipment (where required), but no urinal, and
- c) Be located so that access is not via an area restricted to one sex.



5. The submissions

5.1 The agent submitted copies of:

- drawings of the warehouse
- correspondence between the agent and the authority
- email correspondence between the Department and the agent
- excerpts from G1/AS1
- copies of Determination 2006/73 and 2006/16.

- 5.2 The authority made no submission in response to the application.
- 5.3 Copies of a draft determination were sent to the parties for comment on 29 January 2009. Both parties accepted the draft and the authority noted an error in the address. The address has been corrected.

6. Discussion

General

- 6.1 The authority maintains that the numbers of sanitary facilities are to be determined by the design occupancy stated in the fire report for the warehouse. In reaching this position the authority has referred to a determination issued by the Department that the occupancy was to be calculated 'in relation to the design occupancy load (36) from the fire report as the [Department] has determined'.
- 6.2 The determination identified by the authority was Determination 2006/73, where the matter for determination was whether a lift was required in an existing building that was undergoing a change of use. The intended occupancy for the building in Determination 2006/73 was estimated.
- 6.3 Determination 2006/73 considered the highest possible design occupancies that a particular building could be used for without a change of use as defined by the Building (Specified systems, Change the Use, and Earthquake-prone Buildings) Regulations. The design occupancies given in Table 2.2 of C/AS1 were used in order to do this. This assessment was made in relation to the requirements of the Act and the Building Code with respect to Clause D1 Access, not to establish the building's population for calculating the number of sanitary facilities.
- 6.4 Using the occupancy numbers from a fire design to calculate the number of sanitary facilities can be inappropriate. For example: the fire design occupancy of a retail store will take account of the likely number of visitors to a store, but the sanitary facilities need only be provided for the lesser number of retail staff.
- 6.5 Compliance Document G1/AS1 provides a means of establishing compliance with Clause G1. If a solution is arrived at using G1/AS1 it is deemed to comply with Clause G1.
- 6.6 Figure 1 of G1/AS1 sets out the methods to determine the number of sanitary fixtures required in a building relating to the number of building occupants for the use of the building. Figure 1 provides two methods to do this:
1. where the actual number of occupants is known
 2. where the number of occupants is not known.
- (The second method relies on the use of Table 4 of G1/AS1, which is adopted from C/AS1 Part 2.)
- 6.7 The applicants know the actual number of occupants and have applied the first method. The authority says that the second method must be used.

Method 1: Occupancy numbers known

- 6.8 The applicant has submitted that only 3 persons will be employed in the building. Accordingly, I accept this as being “the actual number of building occupants”. The building has a single use.
- 6.9 With the number of occupants known and with unisex facilities to be provided for all staff, Figure 1 refers to Table 1 to determine the number of sanitary fixtures to be provided. Table 1, under “Commercial, Staff facilities . . .”, says that one unisex toilet facility is required for between 1 to 5 staff (the facility is to be accessible).

Method 2: Occupancy numbers unknown

- 6.10 The building has a floor area of 3,600 m², and the occupancy density from Table 4 for “warehouse storage” is 0.03. This gives a maximum occupant density for the building of 108 people. Again, assuming unisex facilities, Table 1 requires 4 such facilities, with one being accessible. This number exceeds the authority’s stated position of three unisex facilities, one being accessible.

Conclusion

- 6.11 The building is to be used for the bulk storage of milk powder and populated by a limited number of employees. In my opinion the calculated occupancy is grossly unrealistic.
- 6.12 The actual occupancy numbers for the building is known. It is therefore appropriate for the applicant to use the first method from Figure 1, as described above. I conclude that the provision of one unisex accessible facility is sufficient to meet the requirements G1/AS1, and hence the requirements of Clause G1.
- 6.13 I note that, in this instance, there are also other sanitary facilities available in adjacent buildings on the same site in which the building is located.

7. The decision

- 7.1 In accordance with section 188 of the Act I determine that the provision of only one unisex accessible toilet is necessary for the warehouse to comply with Building Code Clause G1 Personal hygiene.

Signed for and on behalf of the Chief Executive of the Department of Building and Housing on 12 March 2009.

John Gardiner
Determinations Manager